ABSTRACT

A damage resistant High Strength, Impact Resistant, Elastic Composite Laminate primary (singular) structure with optionally having first (4) and second (4) outer face layers, having first (2) and second (2) inner reinforced plies being located between the first and second outer layers, and (1) a dissipating element located between the first and second reinforced plies, wherein the dissipating element is adapted to dissipate and redirect, randomly directed active loading applied to at least one of the two outer surface, to tensile loading being directed along the respective longitudinal axis of the inner reinforced ply; and a matrix (3) between (2) and (4).